

CHAPTER 6: SCORP INITIATIVES

In the identification of issues/goals and actions proposed under each, the Michigan DNR is “committed to the conservation, protection, management, use and enjoyment of the State’s natural resources for current and future generations” (DNR mission statement). This flows directly from the DNR’s organic act, Public Act 451 of 1994 as amended.

RESOURCE CONSERVATION

The goal is to protect, restore and, where appropriate, enhance natural resource quality related to public outdoor recreation venues. Priority actions include acquisition of in-holdings; development or renovation at recreation sites that results in cleaner surface waters through reductions in erosion and other sources of pollution; wetland conservation, restoration and enhancement; restoration of native communities of flora and fauna; and provision of fish habitat improvements at or near public access points on state waters.

Environmental quality is the bedrock on which all outdoor recreation is built. A healthy, productive environment sustains living resources such as fish, wildlife and plants and provides an attractive environment for leisure-time activities. It also is central to the DNR’s legal mandate to “protect and conserve the natural resources of the state.”

Partnership Opportunities

It then is ironic that recreational facilities, through their design, use and maintenance, may contribute to reductions in environmental quality. Conversely, it is most fortunate that recreationists support environmental quality at recreation sites and that a number of entities, including governmental agencies, nonprofit organizations and for-profit contractors, are skilled at protecting, restoring and enhancing environmental quality. Further, many have matching funds available to support such environmental improvement where it is most visible and valuable to outdoor recreationists.

Education Opportunities

Outdoor recreation venues also have the potential to educate citizens about resource conservation, including land management practices that can be applied to the 79 percent of Michigan in private ownership. This can be done through interpretive displays and programs and through demonstration sites and land manager training. Again, partnerships with the conservation community and other units of government further enhance funding possibilities and resource restoration expertise.

Urban Opportunities

An important case for targeted action is restoring or enhancing impaired outdoor recreation resources in urban environments. Urban residents often have borne the burden of pollution, and nearby potential recreational environments such as urban waterfronts have been less than desirable recreation sites. The growing movement for greenways, walkable communities and restoration of degraded urban natural resources to provide quality outdoor recreation opportunities represents a priority resource conservation issue in Michigan’s SCORP.

Wetland Opportunities

The 1986 Emergency Wetlands Resources Act (PL 99-645) amended the LWCF Act (PL 88-578) to require that a SCORP contain a wetland priority component that is consistent with the National Wetland Conservation Plan of the U.S. Fish and Wildlife Service and a listing of those

wetland types that should receive priorities for acquisition. Michigan has lost approximately half of the 11 million acres of wetlands found in the state in pre-settlement. In 1990, the Director of the DNR set an ambitious goal of increasing wetland acreage by 500,000 acres. The Michigan Wetlands Advisory Committee refined that goal in 1997 with the Michigan's Wetland Conservation Strategy. They sought to add 50,000 wetlands acres to Michigan's wetland base by 2010.

Recently, with approximately 5.5 million acres of remaining Michigan wetlands, there has been a more concerted effort to conserve, restore and enhance wetlands. In 1998, the North American Waterfowl Management Plan (NAWMP) Michigan Implementation Strategy adopted by Michigan set the following goals to be accomplished by 2013. These habitat goals are in addition to maintaining the estimated 1,830,000 acres of waterfowl production habitat estimated to be present in 1998.

1. Restore and/or construct over 30,000 wetland acres contiguous with grasslands lacking wetlands suitable for waterfowl production on private lands, existing public lands and newly acquired public lands
2. Establish over 60,000 acres of grassland acres contiguous with wetlands suitable for waterfowl production on private lands, existing public lands and newly acquired public lands.
3. Protect an additional 100,000 acres of wetland and associated upland valuable for waterfowl production by preventing naturally functioning wetlands and associated uplands from being negatively altered using current and new legislation, fee title acquisition and long-term easements. In addition, altered wetlands and uplands will be restored and enhanced.
4. Identify and exploit new management opportunities associated with human development including roadside grasslands, county drains and their riparian zones, capped landfills, retention/detention basins and wetland loss mitigation projects. Opportunities also exist to work with utility companies; local, state and national parks; and local and regional planning agencies.
5. Develop conservation information/education initiatives to improve the public's knowledge of wetland values and functions, how to maintain these values and functions, wetland wildlife, wetland management and the control of aggressive exotic plants. Target audiences would include agricultural landowners, industrial landowners, drain commissioners and all landowners interested in wildlife management.
6. Prioritize actions under this plan for the far eastern Upper Peninsula in Chippewa County's Rudyard Clay Plain ecosystem and in the Lower Peninsula basically south of a line from Oscoda City to Muskegon.
7. Establish wetland priority types for protection, restoration and creation including Great Lakes coastal marsh, emergent inland marshes and wet prairie.
8. Emphasize the conservation/restoration of naturally functioning wetlands in other areas of Michigan.

Key funding for wetland conservation comes from the federal North American Wetlands Conservation Act (NAWCA) through a matching grants program. In 2006, nationwide NAWCA grants totaled slightly more than \$42 million. In Michigan, through a total of 24 funded NAWCA grants and matching state and private funds, a total of 29,742 acres of wetlands and associated uplands have been conserved from 1991-2004. Since that time, an additional NAWCA grant to a group of partners headed by Ducks Unlimited, and including the Michigan DNR and 16 other

partners, have conserved or are in the process of conserving an additional 4,000 acres of coastal related wetlands from Saginaw Bay through the western Lake Erie basin in Michigan. Key wetland conservation partners in NAWCA grants over the years have included the Natural Resource Conservation Service of the U.S. Department of Agriculture, the Michigan Department of Natural Resources, the U.S. Fish and Wildlife Service of the U.S. Department of the Interior, Ducks Unlimited, the Nature Conservancy, Pheasants Forever, County Conservation Districts, the Audubon Society, the Michigan Duck Hunters Association, Waterfowl USA, Saginaw Basin Land Conservancy, the Michigan Nature Association, DTE Energy, CMS Energy, various Native American tribes and many other partners including regional and local land conservancies and local park and recreation providers (e.g. Kent County Parks).

A second key effort to meeting this goal is the Conservation Reserve Enhancement Program (CREP) of the U.S. Department of Agriculture's Natural Resource Conservation Service (NRCS) done in partnership with the State of Michigan's Department of Agriculture in cooperation with the DNR and Department of Environmental Quality. CREP is based on voluntary agreements with private landowners to stop row cropping lands adjacent to surface waters to improve water quality (both surface and groundwater) by reducing erosion and by providing wildlife habitat. This includes wetland restoration and enhancement and planting of perennial upland grasses in place of row crops. In return farmers receive payments in excess of current land rent rates for a 15-year agreement. There also are options to execute permanent conservation easements involving larger payments for sites focused on wetland restoration. Michigan's program has been implemented in three watersheds: Saginaw Bay (Lake Huron), River Raisin (Lake Erie) and Lake Macatawa (Lake Michigan). A key partner in conservation, Pheasants Forever, received a \$4 million Clean Michigan Initiative grant in 2005, which has been used by the State of Michigan to match available federal CREP dollars. This has allowed additional signup and provided access to federal monies that are matched to state dollars at a rate of 4:1. As of September 30, 2006, the Michigan Department of Agriculture reported there were 47,800 upland grassland/upland acres enrolled or pending and 16,900 wetland acres for wetland restoration and creation enrolled or pending.

(www.michigan.gov/documents/mda/FY06_ESD_Annual_Report_color_189823_7.pdf - 2007-03-13)

A third important wetlands protection program is the NRCS Wetlands Reserve Program. This voluntary program, which was first authorized in the 1995 Farm Bill, allows private landowners to enter into permanent or 30-year easements with the NRCS to protect defined wetland and associated upland resources on their property in exchange for a cash payment. It also provides funding and technical expertise to restore degraded wetlands and surrounding uplands through cooperation with Ducks Unlimited. Since the federal program's inception in Michigan in 1995, it has enrolled 353 different contracts covering more than 35,474 acres of wetlands and associated upland acres in conservation easements as of September 30, 2007. The program also has an unfunded backlog of 160 landowner requests to enroll an additional 17,697 acres as of September 30, 2006. Further information is available at:

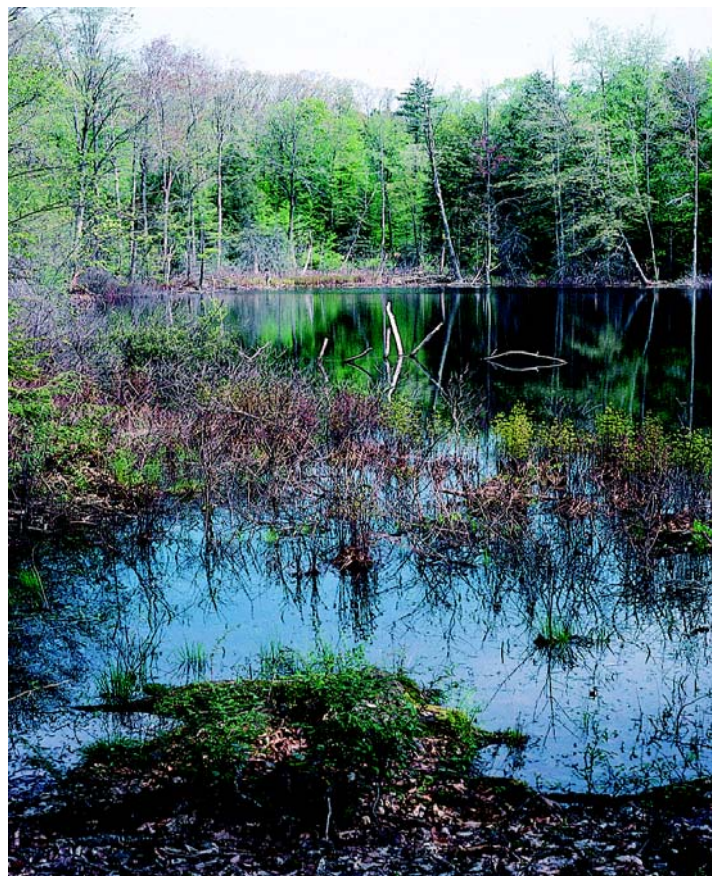
<http://www.nrcs.usda.gov/programs/wrp/>.

When combined, NAWCA grant-funded projects, the Conservation Reserve Enhancement Program and the Wetlands Reserve Program have conserved a total of 82,116 acres of wetlands and associated uplands through 2006. This is substantial progress toward the Michigan North American Waterfowl Management Plan goals set in 1998. The Michigan North American Waterfowl Management Plan Steering Committee is committed to reaching its Michigan habitat goals by 2013 through cooperative effort, partnerships and aggressively seeking grants to acquire, protect and restore wetlands and associated upland across Michigan

and especially in the focus areas of the southern half of Lower Michigan and the far eastern Upper Peninsula.

Other efforts complement this statewide thrust. For example, the Saginaw Bay Watershed Initiative Network, a nonprofit organization supported by 13 area foundations dedicated to the environmental, social and economic health of the Saginaw Bay Watershed (Michigan's largest watershed) developed a wildlife habitat conservation framework for the watershed in 2000. The highest conservation priority in the framework is Great Lakes coastal marshes, followed by river floodplains and inland wetlands. Although Great Lakes coastal marshes comprise only three percent of the land area in the watershed, they are the most biologically rich portion of the watershed and directly and indirectly support a wide variety of outdoor recreation activities and a significant portion of the region's tourism economy.

At the local level, a number of governmental entities have put in place regulations and zoning protections to maintain wetlands. Local park and recreation agencies have increasingly embraced wetlands as important green space for acquisition and protection and as unique environments for interpretation. National conservancies, such as the Nature Conservancy, and regional conservancies also have made wetlands high-priority habitat for protection through conservation easements or fee simple acquisition.



TRAILS

The goal is to expand and secure the system of land and water trails in Michigan to promote recreational, economic, transportation and health benefits. Expansion and security may include the use of partnerships or acquisition of fee simple ownership, perpetual easements or long-term leases for trails. In addition, targeted expansions should provide for safe, socially acceptable access for trail users to needed goods and services, connection of outdoor recreation sites and link existing trails to form a more cohesive network that includes more effective use of major transportation corridors for compatible non-motorized transportation.

The Connecting Michigan and Michigan Trails at a Crossroads initiatives, coupled with the strong interest demonstrated in trails by registered voter respondents and local park administrators, make this an important priority.

Rail-Trail Opportunities



Pere Marquette Rail Trail

As of 2006 there are 1,145 miles of rail-trail in Michigan. These venues have clearly demonstrated outdoor recreation, health, economic and transportation benefits through studies funded by MDOT and others. There are many hundreds of additional miles currently abandoned, but not in public ownership. A concerted effort needs to be made over the next five years to publicly acquire as

many miles as possible of abandoned and soon to be abandoned rail-corridors. It is vital to maintain these important transportation links and potential recreational corridors.

One step in achieving an interconnected network of trails was the July 2007 approval by the Michigan Transportation Commission of the purchase by the Michigan Department of Transportation of abandoned rail corridors for non-motorized transportation.

Non-Motorized Trail Opportunities

Another set of valued trail opportunities includes those non-paved public trails serving hikers, mountain bikers, equestrians and cross-country ski enthusiasts. These include the 880 miles of state forest pathways, the 880 miles of state park trails and the North Country National Scenic Trail as well as other trails on federal lands. Coupled with these are an unknown number of locally owned trails in local parks and public transportation rights-of-way. In total, these provide valued links between recreation venues and opportunities for physical fitness and wildlife viewing. They also can serve groups with unique needs such as the Michigan Shore-to-Shore Riding-Hiking trail, which targets the needs of equestrians with appropriate day use and overnight camping facilities. A major challenge faced by this existing system, and a priority of this plan, is the need for significant renovation of bridges, the development trailhead facilities and the re-routing of trails to protect environmental values.



Transportation Integration Opportunities

The integration of non-motorized trail opportunities into regional transportation planning and systems is one way of achieving the trails goal. This may include projects such as designing non-motorized transportation options into major new or renovated transportation corridors such as the new southern beltway expressway in the Grand Rapids area (M-6) and planning to include non-motorized transportation near or along new US-127 in Clinton and Gratiot counties as the corridor is converted from a four-lane unlimited access highway to a four-lane limited access expressway with service roads. This also could be accomplished on a smaller scale such as developing non-motorized trails between neighborhoods and schools to facilitate safe and healthful passage by children on their way to and from school. The Safe Routes to Schools Program of the Governor's Council on Physical Fitness, in cooperation with MDOT has launched a number of projects with individual school districts to better inform parents and students about physically active, enjoyable and safe ways for students and their parents to get to schools.

Motorized Trail Opportunities

Motorized trail recreation participation continues to increase from the depressed levels in the 1980s. Both ORV and snowmobile users note their number-one need is additional trail mileage, as heard during the public meetings for the draft 2005 Michigan ORV Plan. User safety and social conflict reduction are key motorized trail challenges that can be met in part through additional, appropriate trails providing safer passage for trail users to goods and services. One way to accomplish this is by securing long-term trail corridors through the lands of willing private owners through easements or long-term leases. Fortunately, motorized trail users, through snowmobile trail permits and ORV licenses, contribute to restricted funds that can provide much of the money for such agreements.

Water Trail Opportunities

Water trails for paddle sports are increasing in importance as sales of canoes, kayaks and rafts climb. These trails provide close contact with natural resources as well as highlighting cultural and historic resources related to water travel. They also facilitate other outdoor recreation activities such as fishing and wildlife viewing. Additional water access sites, development of paddle-sport specific facilities such as canoe slides, portages, etc. are needed capital improvements.

UNIVERSAL ACCESS TO OUTDOOR RECREATION

The goal is to provide Michigianians and visitors, including those of differing limitations and abilities, universal access to outdoor recreation venues. This includes evaluation of existing facilities and venues; renovation to address deficiencies; and the design, construction and management of new facilities to meet and, wherever possible, exceed current accessibility standards and guidelines.



Inglenook Park in Southfield, Michigan

One major challenge all public suppliers of outdoor recreation face is the need to accommodate mentally and physically challenged recreationists at these existing properties with the exception of federally designated wilderness areas. Although all new facilities must comply with the requirements of the federal Americans with Disabilities Act and all applicable state regulations for barrier-free accessibility, most recreation facilities pre-date those standards and requirements and are in need of significant renovation to become fully accessible. Many facilities date back three, four or even five decades.

As the population continues to age, the proportion of Michigianians with disabilities is likely to increase. Further, moderate physical exercise for those with disabilities such as heart conditions and arthritis, as well as those more often considered disabled such as individuals in a wheel chair or with visual or auditory impairments, is vital to physical and mental health. Outdoor recreation venues such as trails, parks, wildlife areas and other sites provide excellent opportunities to maintain flexibility and cardio-vascular health, and socialize while participating in life-long outdoor recreation activities.

For people with disabilities to successfully enjoy outdoor recreation, reasonable accommodation (per the 1990 Americans with Disabilities Act and subsequent legislation, rules, and design standards and guidelines) needs to be provided. The 2004 DNR Strategic Plan for Accessibility provides an important blueprint for action. The Access to Recreation grant from the W. K. Kellogg Foundation provides critical seed money to spur even greater investment in going beyond the minimum legal requirements

to provide universally accessible outdoor recreation opportunities. The DNR Grants program has continually updated and integrated more sophisticated universal access considerations into requirements for community recreation plans and grant applications for MNRTF and LWCF funds.

One significant challenge is to modify existing facilities to make them accessible to people with disabilities, while maintaining the integrity of design (in some cases in historic structures) and in relatively new structures which are not near the end of their useful life. In many instances, a wise investment is to restore this valued infrastructure in such a way that it respects the traditions of the past, uses the technology of today in construction, accommodates the needs of persons with disabilities, and is flexible enough to adapt to the recreation demands of tomorrow.

COMMUNITY OUTDOOR RECREATION

The goal is to improve the range, quality and quantity of community outdoor recreation opportunities. This is focused on the development, restoration and renovation of facilities and infrastructure that support outdoor recreation at the local level.

Of the 467 communities with current outdoor recreation plans in July 2007, there was a strong interest in community outdoor recreation. Community outdoor recreation provides a valuable connection for all Michiganders with family, other members of the community and the environment. However, compared to the last inventory of all DNR Grants files in late 2002, there are almost 25 percent fewer communities with in-force plans than a half decade ago. The challenge of local units to meet park and recreation needs along with other needs in a climate of declining state revenue sharing and a weak economy has been significant. Yet local units are the closest outdoor recreation opportunities to many and a vital service in our state to promote the welfare of the public. We need to continue to have local units acquire land and develop, renovate and restore facilities for outdoor athletic fields, green space, trails, beaches, outdoor swimming pools, interpretive centers, arboretums and many other facilities and opportunities that enhance the quality of life across Michigan. Local outdoor recreation opportunities directly serve community residents, thereby conserving energy, promoting health and fitness and improving the quality of life in neighborhoods.



Hawk Island County Park in Ingham County, Michigan

Meeting Locally Identified Outdoor Recreation Needs

Each local outdoor recreation plan is unique in that it focuses directly on the needs of community residents and visitors, taking into account other outdoor recreation opportunities already provided, community traditions and shifts in preference and the stewardship responsibilities of maintaining resources and facilities once acquired and built. Hence, flexibility to meet the needs of diverse communities is critical. In the past few years, less than one dollar of every five requested by local communities from the LWCF for local projects has been available because of the extraordinary demand for grant dollars and the considerable amount of matching funds available at the local level.

Safety and Security Opportunities

Safety and security is a concern of many, especially in their own community. It also was one of the key ways to improve the quality of public outdoor recreation in Michigan as identified by Michigan voters in the statewide survey. The elderly, single mothers with young children and the disabled often feel vulnerable. Using crime prevention through environmental design (CPTED) can enhance one's sense of security, enhance their actual safety and security in recreational settings and can make community recreation facilities and opportunities more attractive. The core of CPTED is based on providing natural access control, natural surveillance and territorial reinforcement. These can be positively incorporated in the design of all public facilities, including park and recreation areas. Excellent examples of the success of CPTED are available from Toronto, Ontario, Knoxville, and Houston (National Crime Prevention Council 1997).

Natural Resource Based Recreation Opportunities

For many communities, opportunities for natural resource based outdoor recreation, such as fishing, swimming, hunting, shooting and wildlife viewing often are limited by a lack of public ownership, open space, experience, education, facilities or suitable natural resources because of pollution and impairment. The conservation of natural resources was rated as the most important of all the priorities of the 2003-2007 SCORP by voters and local park and recreation agency administrators in our statewide surveys for the 2008-2012 SCORP. Natural resource based recreation brings all into close contact with nature and provides a compelling rationale and commitment to conservation. These opportunities need to be expanded and given priority in urban areas. It also is important to couple local public acquisition of such lands or development of support facilities with programs that welcome newcomers to a wide range of outdoor recreational opportunities. This may involve cooperation with a range of nonprofit youth serving entities such as Big Brothers/Big Sisters, the Boys and Girls Clubs, the YWCA and YMCA, Scouting, faith-based organizations, etc. along with outdoor recreation oriented organizations such as the Michigan United Conservation Clubs.

One example of creating such opportunity is the establishment in December 2001 of the first US/Canada international wildlife refuge, the Detroit River International Wildlife Refuge. This refuge is managed by the U.S. Fish and Wildlife Service in cooperation with the DNR. The refuge also involves many local partners. Michigan Congressman John Dingell was the principal sponsor of this groundbreaking trend in providing and enhancing urban outdoor recreation opportunity. The new refuge clearly recognizes the fish, wildlife and natural resource based outdoor recreation values of the Lower Detroit River and surrounding environments.

FOREST RECREATION INFRASTRUCTURE

The goal is to fulfill the mandate of the Forest Recreation Act of 1998 to provide a quality integrated forest recreation system. The focus is to renovate and construct the appropriate low-maintenance intensity rustic recreation facilities (state forest campgrounds, water access sites, trails, etc.) to support natural resource based outdoor recreation and safeguard the environment, while providing universal access.

Michigan's state forests are the property of all the people of the state of Michigan. They provide the largest public land base for outdoor recreation in the country east of the Mississippi River. Within the 3.9 million acres of state forests, approximately 140 designated campgrounds, 116 designated water access sites, 485 additional undeveloped water access sites, 880 miles of non-motorized pathways, 2,500 miles of designated ORV trails and 1,500 miles of designated snowmobile trails facilitate outdoor recreation. In addition, a system of over 8,000 miles of forest roads provides access for dispersed recreation enthusiasts such as hunters, wildlife viewers, anglers, and those who pick wild edibles or enjoy non-programmed nature appreciation.

The forest recreation system has never received a system-wide renovation of its rustic outdoor recreation facilities, some of which date back to the Civilian Conservation Corps of the 1930's. These have high-maintenance costs because they are not constructed of modern, more impervious materials. With an estimated 23 million annual recreational visits using state forest recreation venues/programs, the forest recreation system is an important asset in meeting public recreation needs as well as in helping positively shape Michigan's image for visitors and supporting the tourism industry. It also demonstrates that outdoor recreation can be enjoyed in a rustic setting as part of a multiple-use working forest system along with the appropriate use and management of wood resources, oil and gas and habitat for fish and wildlife, while maintaining environmental integrity.

Such a renovation and upgrade of facilities also would better protect environmental quality from negative recreation impacts at and near campgrounds, water access sites and trails while providing appropriate universal access.

STATE PARK INFRASTRUCTURE

The goal is to enhance the quality of Michigan State Park outdoor recreation opportunities by renovating and constructing appropriate facilities (campgrounds, water access sites, trails, etc.) to support natural resource based outdoor recreation, safeguard the environment and preserve, protect and interpret Michigan's outdoor recreation heritage while providing universal access.

Michigan's state park system is the property of all the people of the state of Michigan. It has received support from voters for major bond programs and a constitutionally protected trust fund for state parks. It consists of 97 properties covering over 270,000 acres that annually serves over 26 million outdoor recreation visits. Outdoor recreation is focused on camping, trail activities, boating, fishing, hunting and nature, and cultural resource appreciation and observation. The state park system is an important asset in meeting public outdoor recreation needs as well as to Michigan's image and the tourism industry. It provides almost 13,000 campsites, the majority of public Great Lakes beachfront, 880 miles of non-motorized trails and almost 200,000 acres of land open to hunting. Finally it fills an important niche of providing an educational and informational gateway between the public to the DNR concerning natural resources and outdoor recreation. This is done through eight major interpretive centers and through seasonal interpreters at another 40 parks.

While Michigan State Parks have received considerable capital support from the Protecting Michigan's Future Bond (1988) and Clean Michigan Initiative (1998), and annually continue to receive \$5 million from Proposal P (1994) coupled with the constitutionally protected trust fund (Gillette Trust Fund established in 1994), there still are unmet infrastructure needs of millions of dollars annually for visitor facilities supporting outdoor recreation and those providing environmental protection from intense recreational use. Much of this focus is on protecting natural resource integrity, such as clean surface water, while serving the needs of 26 million visitors. Land acquisition to block in critical habitat and restoration of habitat within heavily used parks are additional needs.

Another important aspect of Michigan state parks is protecting valued historic and cultural sites. Universal access within the context of historical and cultural sites presents special challenges that can be met through careful renovation and the use of technology.

COORDINATION AND COMMUNICATION AMONG RECREATION PROVIDERS

The goal is to expand systematic coordination, cooperation and information gathering among outdoor recreation providers such as federal, state, regional and local government agencies, schools, nonprofit cooperators and willing private landowners. In conjunction, there should be an increase in communication with the public concerning outdoor recreation goals, needs and management.

Regular, systematic data collection and sharing of information about outdoor recreation participation, needs of outdoor recreationists and the influence of outdoor recreation on individuals, communities, the economy and the environment will promote more efficient and effective management. Further, enhanced communication with the public, especially the outdoor recreating public, will provide more meaningful opportunities for public involvement.

This can promote efficiency, link facilities and resources and provide recreationists with better experiences where they don't have to worry about differential fees, permits and rules. Land and water trail networks, ecosystem health and access would all be substantially improved through increased cooperation. As the four national forest units in Michigan update their management plans, this would be an excellent time to expand such efforts. The current focus of such integration efforts is in the effort to implement ecosystem management in the eastern Upper Peninsula, but it could effectively be broadened to look at the interface between state and federal lands across Michigan. Another valuable model of integration is in the management of long-distance trail networks through intergovernmental cooperation agreement, recreation authorities, memorandums of understanding, etc.

Regular studies of outdoor recreation in Michigan can provide a valuable analysis of trends and provide early warning of changes in public attitudes and preferences. Regularly assessing information from in-force community recreation plans and having that information reported in a fashion where data from different agencies can be compared and aggregated is vital.

GREEN TECHNOLOGY IN OUTDOOR RECREATION

The goal is to reduce the use of energy in the provision of outdoor recreation. This will be done by incorporation of environmentally friendly practices and technology in the design, development and renovation of outdoor recreation opportunities. This includes more efficient lighting including the more effective use of natural light, better use of solar, wind and other renewable sources of energy, use of renewable fuels (e.g. bio-diesel) to power operational equipment, improved recycling and reuse of items currently in the waste stream in outdoor recreation venues, etc.

Outdoor recreation providers have the opportunity to test and demonstrate to the public how to incorporate energy-saving technology into everyday life. Their unique role as acknowledged environmental stewards and environmental educators who manage lands, resources and facilities, as well as providing valued outdoor recreation, creates an opportunity to reach many with important energy-saving information.

The Michigan State Park system is a national leader in this movement with their Green Initiatives (http://www.michigan.gov/dnr/0,1607,7-153-10365_37783---,00.html). Those initiatives include:

- Product metering devices to limit use of products (e.g. cleaning solutions, fertilizer, etc.) to the appropriate amount
- Green buildings to reduce energy use in buildings with more efficient lighting, insulation, use of natural light, etc.
- Growing not mowing to reduce energy use and create better wildlife habitat and improve water quality
- Bio-products including use of bio-fuels to operate maintenance equipment
- Biological control of invasive species
- Cleaning green through the use of certified “green” cleaning agents to protect environmental and human health
- Stepping up recycling efforts

RECRUITMENT AND RETENTION OF HUNTERS AND ANGLERS

The goal is to reverse the trend in the decline of the number of hunters and anglers in Michigan through the recruitment and retention of hunters and anglers through three key initiatives: provide more public hunting opportunity, provide an opportunity for a wider spectrum of society to participate in hunting and create and expand opportunities to infuse hunting and related outdoor recreation into existing and emerging mentoring programs.



Photo courtesy of Department of Natural Resources, Dave Kenyon

From 1986-2005, the number of distinct hunters declined almost 14 percent to 789,244 and the number of distinct anglers declined almost 22 percent to 1,161,432. Hunting and fishing license dollars provide 26 percent of the funding for the DNR's conservation mission directly through license revenue and another 12 percent through federal excise taxes on sporting arms, ammunition and fishing equipment. Based on the 2006 recommendations of the Hunter Recruitment and Retention Work Group, the Natural Resources Commission supported three key initiatives: provide more public hunting opportunity (including improving

maps/public information identifying the 9.5 million acres of Michigan pen to public hunting); provide opportunity for a wider spectrum of society to participate in hunting; create and expand opportunities to infuse hunting and related outdoor recreation into existing and emerging mentoring programs.

DNR Director Rebecca Humphries, at the Conservation Summit February 7, 2007, emphasized the recruitment and retention of hunters and anglers as one of the four major challenges of long-term conservation in Michigan. She noted that hunters and anglers provide the largest single source of funds for conservation in Michigan through their purchase of licenses and federal excise taxes generated for conservation through the purchase of sporting arms, archery equipment, sporting ammunition and fishing equipment. Based on the recommendations of the DNR Hunter Recruitment and Retention Work Group and others, legislation was introduced and passed that lowered the minimum age for small game and archery deer hunting from 12 to 10 and for firearm deer hunting on private lands from 14 to 12. In addition, an apprentice hunting license was established that allowed a new hunter who had not completed hunter safety to hunt under the direct supervision of a licensed adult hunter for up to two years prior to completing hunter safety. During 2007, the first year the reduced minimum hunting age and apprentice license laws were in place, the number of junior licenses sold (to those 16 and under) increased 24 percent for junior deer licenses, 12 percent for junior small game licenses and 22 percent for junior furbearer licenses. In addition there were over 10,000 distinct apprentice license holders, of which three-fourths were junior hunters.

A Hunter Recruitment and Retention Implementation Work Group is now examining ways to better link hunting with specific youth-mentoring programs and to retain hunters in hunting through more effective accommodation of those with disabilities, including those undergoing a gradual loss of physical abilities and stamina through normal aging.

Development of an approach similar to that used for hunting is likely to be implemented for fishing recruitment and retention. This will build on many past efforts and will link together diverse partners with a common goal to expand fishing participation in Michigan.

